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MINNESOTA LAND OWNERSHIP TRENDS, 1962-1977

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ABSTRACT.—The distribution of Minnesota's commercial forest land among ownership classes has remained stable between 1962 and 1977. This note summarizes commercial forest ownership data by Forest Survey Unit for 1962 and 1977 and presents more detailed area statistics for Minnesota's 17 northern counties.

KEY WORDS: commercial forest area, commercial forest ownership.

Although the area of commercial forest land in Minnesota declined 11 percent between 1962[1] and 1977, the distribution of the land among ownership classes remained stable. In 1977, 54 percent of the State's commercial forest land was publicly owned; 46 percent was privately owned. 1962 area statistics showed the same distribution.

The largest public owner of commercial forest land in 1977 was the State of Minnesota, with 2.7 million acres. Commercial forest land in State ownership decreased 34.7 thousand acres between 1962 and 1977. This decrease is the result of the State acquiring less commercial forest land than it lost through sales, expansion of the Boundary Waters Canoe Area (BWCA), creation of the Voyageurs National Park, and transfers to State Parks. The only ownership class to show an increase in commercial forest area was forest industry; forest industry commercial forest land holdings increased from 715.7 thousand acres in 1962 to 772.0 thousand acres in 1977.

All other ownership classes showed a decline in commercial forest area. The farmer and miscellaneous private ownership class lost the most acreage, 915.0 thousand acres, but national forests showed the largest percent decline, 20 percent. Most of the decline in national forest ownership is the result of commercial forest land in the Superior National Forest being transferred to the BWCA, where it is classified as productive-reserved.

Eighty-two percent of Minnesota's commercial forest land is located in the 17 northern counties that make up the Aspen-Birch and Northern Pine Forest Survey Units (fig. 1). Commercial forests account for 57 percent of the total land area in northern Minnesota. The 11.2 million acres of commercial forest land reported here in 1977 was 1.1 million acres less than that found in 1962. St. Louis County, the largest county in the region, accounted for the largest portion of the loss. Most of the decline in commercial forest land in St. Louis County was due to the expansion of the BWCA.

The majority of commercial forest land in the region is publicly owned. State and county and municipal ownership classes equally control approximately 41 percent of the commercial forest land in the region (4.6 million acres). The Superior and Chippewa National Forests contain 1.7 million acres of commercial

[1] *Previously published 1962 statistics have been adjusted to be comparable with 1977 data. Adjustments were necessary because Survey Unit boundaries changed between surveys. Further adjustments were required because definitions have changed between surveys and survey procedures have improved. Improvements in survey procedures include better ground control during the selection of sample points from aerial photos and improved methods for determining unproductive forest land.*

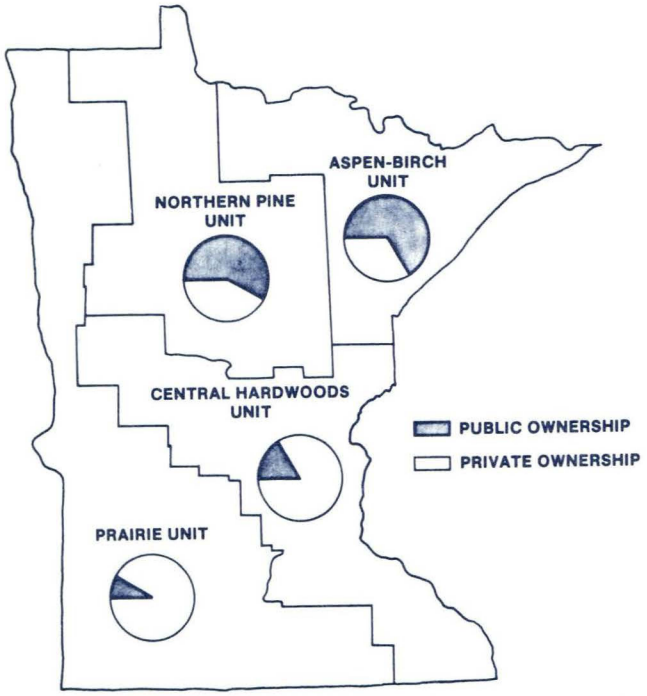

Figure 1.— *Percent of commercial forest area in public ownership by Forest Survey Unit, Minnesota, 1977.*

forest land, concentrated in six counties— St. Louis, Lake, Cook, Itasca, Cass, and Beltrami. The area of commercial forest land in the national forests declined in every county between 1962 and 1977 with the exception of Beltrami County. St. Louis and Lake Counties showed the largest decline in national forest area (161.7 thousand acres and 143.0 thousand acres, respectively). The Bureau of Indian Affairs, Bureau of Land Management, Fish and Wildlife Service, and other federal agencies administer the remaining 587.5 thousand acres of publicly owned land in the region.

Farmer and miscellaneous private owners control 3.5 million acres of commercial forest land in the region, 31 percent of the total. In northern Minnesota, commercial forest land accounts for 45 percent of the total land in this ownership category. Farmer and miscellaneous private commercial forest land declined 380.9 thousand acres between 1962 and 1977.

Forest industries own commercial forest land in most counties in the region, the exceptions being Mahnomen and Roseau Counties. Ninety-five per-

Table 1.— *Area of commercial forest land[1] by Survey Unit and ownership classes, Minnesota, 1962 and 1977*
(In thousand acres)

Year	All owners	National forest[2]	Other federal[3]	State[4]	County and municipal[5]	Forest industry[6]	Farmer and misc. private[7]
ASPEN-BIRCH							
1977	5,451.4	1,152.8	126.3	1,132.1	1,185.9	534.7	1,319.6
1962	6,244.0	1,572.3	158.7	1,190.1	1,289.3	549.5	1,484.1
Change	(–)792.6	(–)419.5	(–)32.4	(–)58.0	(–)103.4	(–)14.8	(–)164.5
NORTHERN PINE UNIT							
1977	5,758.4	562.3	461.2	1,228.7	1,096.7	233.8	2,175.7
1962	6,025.0	569.7	457.9	1,208.4	1,233.6	163.3	2,392.1
Change	(–)266.6	(–)7.4	(+)3.3	(+)20.3	(–)136.9	(+)70.5	(–)216.4
CENTRAL HARDWOODS UNIT							
1977	1,951.1	—	24.7	244.7	59.0	0.5	1,622.2
1962	2,360.3	—	45.2	241.5	134.2	2.9	1,936.5
Change	(–)409.2	—	(–)20.5	(+) 3.2	(–)75.2	(–)2.4	(–)314.3
PRAIRIE UNIT							
1977	534.2	—	9.1	45.0	—	3.0	477.1
1962	782.5	—	14.3	45.2	26.1	—	696.9
Change	(–)248.3	—	(–)5.2	(–)0.2	(–)26.1	(+)3.0	(–)219.8
ALL UNITS							
1977	13,695.1	1,715.1	621.3	2,650.5	2,341.6	772.0	5,594.6
1962	15,411.8	2,142.0	676.1	2,685.2	2,683.2	715.7	6,509.6
Change	(–)1,716.7	(–)426.9	(–)54.8	(–)34.7	(–)341.6	(+)56.3	(–)915.0

[1]Forest land that is producing or is capable of producing crops of industrial wood and that is not withdrawn from timber utilization by statute or administrative regulation.
[2]Federal land that has been designated by executive order or statute as national forest or purchase units, and other land under the administration of the USDA Forest Service.
[3]Federal lands other than national forests.
[4]Land owned by states, or land leased by them for more than 50 years.
[5]Land owned by counties, or local public agencies, or land leased by them for more than 50 years.
[6]Land owned by companies or individuals operating primary wood-using plants.
[7]Land privately owned by other than forest industry.

Table 2.— *Area of commercial forest land*[1] *by county and ownership, seventeen northern counties, Minnesota, 1962 and 1977*
(In thousand acres)

County and year	All owners	National forest [2]	Other public [3]	Forest industry[4]	Farmer and misc. private[5]
Aitkin					
1977	672.5	—	405.7	4.2	262.6
1962	687.5	—	414.4	3.0	270.1
Change	(–)15.0	—	(–)8.7	(+)1.2	(–)7.5
Becker					
1977	313.9	—	128.0	2.6	183.3
1962	326.1	—	138.3	9.8	178.0
Change	(–)12.2	—	(–)10.3	(–)7.2	(+)5.3
Beltrami					
1977	794.6	54.7	556.5	2.5	180.9
1962	833.3	54.4	569.5	6.4	203.0
Change	(–)38.7	(+)0.3	(–)13.0	(–)3.9	(–)22.1
Carlton					
1977	312.8	—	109.1	27.1	176.6
1962	336.2	—	140.7	10.9	184.6
Change	(–)23.4	—	(–)31.6	(+)16.2	(–)8.0
Cass					
1977	858.6	242.7	343.5	28.1	244.3
1962	909.9	249.6	356.6	24.5	279.2
Change	(–)51.3	(–)6.9	(–)13.1	(+)3.6	(–)34.9
Clearwater					
1977	301.7	—	146.2	5.5	150.0
1962	322.5	—	165.7	5.6	151.2
Change	(–)20.8	—	(–)19.5	(–)0.1	(–)1.2
Cook					
1977	538.8	335.9	112.2	37.7	53.0
1962	685.7	449.3	129.6	48.5	58.3
Change	(–)146.9	(–)113.4	(–)17.4	(–)10.8	(–)5.3
Crow Wing					
1977	371.9	—	91.2	18.3	262.4
1962	375.7	—	96.8	17.9	261.0
Change	(–)3.8	—	(–)5.6	(+)0.4	(+)1.4
Hubbard					
1977	398.0	—	194.2	20.9	182.9
1962	405.2	—	202.0	22.0	181.2
Change	(–)7.2	—	(–)7.8	(–)1.1	(+)1.7
Itasca					
1977	1,281.0	264.9	471.0	131.3	413.8
1962	1,319.3	265.7	546.9	55.3	451.4
Change	(–)38.3	(–)0.8	(–)75.9	(+)76.0	(–)37.6
Koochiching					
1977	1,278.9	—	913.8	227.6	137.5
1962	1,341.4	1.4	980.7	204.0	155.3
Change	(–)62.5	(–)1.4	(–)66.9	(+)23.6	(–)17.8
Lake					
1977	855.3	370.6	250.1	97.5	137.1
1962	1,018.2	513.6	240.6	126.0	138.0
Change	(–)162.9	(–)143.0	(+)9.5	(–)28.5	(–)0.9
Lake of the Woods					
1977	360.6	—	272.3	1.6	86.7
1962	380.9	—	243.8	4.7	132.4
Change	(–)20.3	—	(+)28.5	(–)3.1	(–)45.7
Mahnomen					
1977	106.4	—	54.2	—	52.2
1962	126.6	—	61.6	0.4	64.6
Change	(–)20.2	—	(–)7.4	(–)0.4	(–)12.4
Roseau					
1977	191.9	—	106.6	—	85.3
1962	229.2	—	85.1	0.4	143.7
Change	(–)37.3	—	(+)21.5	(–)0.4	(–)58.4
St. Louis					
1977	2,465.6	446.3	1,059.1	144.8	815.4
1962	2,862.5	608.0	1,146.5	160.1	947.9
Change	(–)396.9	(–)161.7	(–)87.4	(–)15.3	(–)132.5
Wadena					
1977	107.3	—	17.2	18.8	71.3
1962	108.8	—	19.2	13.3	76.3
Change	(–)1.5	—	(–)2.0	(+)5.5	(–)5.0
Total					
1977	11,209.8	1,715.1	5,230.9	768.5	3,495.3
1962	12,269.0	2,142.0	5,538.0	712.8	3,876.2
Change	(–)1,059.2	(–)426.9	(–)307.1	(+)55.7	(–)380.9
Percent					
1977	100.0	15.3	46.7	6.8	31.2
1962	100.0	17.5	45.1	5.8	31.6

[1]Forest land that is producing or is capable of producing crops of industrial wood and that is not withdrawn from timber utilization by statute or administrative regulation.
[2]Federal land that has been designated by executive order or statute as national forest or purchase units, and other land under administration of the USDA Forest Service.
[3]Public land other than national forest land, including land administered by federal, state, or local public agencies.
[4]Land owned by companies or individuals operating primary wood-using plants.
[5]Land privately owned by other than forest industry.

cent of forest industry land is classified as commercial forest. Forest industries were the only ownership class in the region to show an increase in commercial forest land between 1962 and 1977. The increase was especially notable in Itasca County.

The sampling error for commercial forest areas from this survey is less than 1.5 percent (at one standard deviation) per million acres.

Table 3.— *Total land areas*[1] *by county and ownership, seventeen northern counties, Minnesota, 1962*[2] *and 1977*[3]
(In thousand acres)

County and year	All owners	National forest[4]	Other public[5]	Forest industry[6]	Farmer and misc. private[7]
Aitkin					
1977	1,169.7	—	632.6	5.8	531.3
1962	1,167.4	—	723.3	4.4	439.7
Change	(+)2.3	—	(–)90.7	(+)1.4	(+)91.6
Becker					
1977	830.0	—	169.2	2.6	658.2
1962	841.6	—	180.0	10.2	651.4
Change	(–)11.6	—	(+)10.8	(–)7.6	(+)6.8
Beltrami					
1977	1,604.2	61.6	1,032.3	3.0	507.3
1962	1,610.9	59.7	1,065.7	7.5	478.0
Change	(–)6.7	(+)1.9	(–)33.4	(–)4.5	(+)29.3
Carlton					
1977	551.8	—	157.2	28.8	365.8
1962	550.4	—	201.5	12.0	336.9
Change	(+)1.4	—	(–)44.3	(+)16.8	(+)28.9
Cass					
1977	1,278.8	285.3	476.9	28.1	488.5
1962	1,313.9	281.7	492.1	28.7	511.4
Change	(–)35.1	(+)3.6	(–)15.2	(–)0.6	(–)22.9
Clearwater					
1977	639.9	—	279.2	5.5	355.2
1962	643.2	—	291.2	7.4	344.6
Change	(–)3.3	—	(–)12.0	(–)1.9	(+)10.6
Cook					
1977	861.4	630.4	127.0	37.8	66.2
1962	897.9	630.0	183.7	48.6	35.6
Change	(–)36.5	(+).4	(–)56.7	(–)10.8	(+)30.6
Crow Wing					
1977	636.5	—	126.2	20.7	489.6
1962	639.4	—	142.2	20.2	477.0
Change	(–)2.9	—	(–)16.0	(+).5	(+)12.6
Hubbard					
1977	596.2	—	222.8	22.4	351.0
1962	596.5	—	233.6	24.8	338.1
Change	(–)0.3	—	(–)10.8	(–)2.4	(+)12.9
Itasca					
1977	1,685.3	297.9	660.5	141.5	585.4
1962	1,704.3	298.1	765.2	58.8	582.2
Change	(–)19.0	(–)0.2	(–)104.7	(+)82.7	(+)3.2
Koochiching					
1977	2,001.3	—	1,471.9	237.7	291.7
1962	2,002.6	1.6	1,496.9	212.7	291.4
Change	(–)1.3	(–)1.6	(–)25.0	(+)25.0	(+)0.3
Lake					
1977	1,319.8	737.0	323.8	100.4	158.6
1962	1,364.5	725.4	335.4	129.7	174.0
Change	(–)44.7	(+)11.6	(–)11.6	(–)29.3	(–)15.4
Lake of the Woods					
1977	838.8	—	644.6	1.6	192.6
1962	837.1	—	586.1	4.8	246.2
Change	(+)1.7	—	(+)58.5	(–)3.2	(–)53.6
Mahnomen					
1977	360.2	—	80.9	—	279.3
1962	367.4	—	87.1	0.7	279.6
Change	(–)7.2	—	(–)6.2	(–)0.7	(–)0.3
Roseau					
1977	1,072.8	—	305.1	—	767.7
1962	1,072.6	—	361.1	0.9	710.6
Change	(+)0.2	—	(–)56.0	(–)0.9	(+)57.1
St. Louis					
1977	3,899.1	766.6	1,549.4	150.9	1,432.2
1962	4,019.8	767.8	1,633.3	172.4	1,446.3
Change	(–)120.7	(–)1.2	(–)83.9	(–)21.5	(–)14.1
Wadena					
1977	342.7	—	29.2	21.3	292.2
1962	343.0	—	34.9	17.9	290.2
Change	(–)0.3	—	(–)5.7	(+)3.4	(+)2.0
Total					
1977	19,688.5	2,778.8	8,288.8	808.1	7,812.8
1962	19,972.5	2,764.3	8,813.3	761.7	7,633.2
Change	(–)284.0	(+)14.5	(–)524.5	(+)46.4	(+)179.6
Percent					
1977	100.0	14.1	42.1	4.1	39.7
1962	100.0	13.9	44.1	3.8	38.2

[1]The area of dry land and land temporarily or partially covered by water such as marshes, swamps, and river flood plains; streams, sloughs, estuaries, and canals less than one-eighth of a statute mile in width; and lakes, reservoirs, and ponds less than 40 acres in area. Total land in all ownership by county is based on U.S. Bureau Census data.
[2]U.S. Bureau of the Census, 1960.
[3]U.S. Bureau of the Census, 1970.
[4]Federal land that has been designated by executive order or statute as national forest or purchase units, and other land under administration of the USDA Forest Service.
[5]Public land other than national forest land, including land admininstered by federal, State, or local public agencies.
[6]Land owned by companies or individuals operating primary wood-using plants.
[7]Land privately owned by other than forest industry.

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